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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/781,235	02/13/2001	Naoki Matsui	54024-027	7943

7590 06/02/2005

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EXAMINER

VIEAUX, GARY

ART UNIT	PAPER NUMBER
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2612

DATE MAILED: 06/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/781,235

Applicant(s)

MATSUI, NAOKI

Examiner

Gary C. Vieaux

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 4, 6-8 and 10-14 is/are rejected.
- 7) ☒ Claim(s) 5 and 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 November 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Change of Examiner

5 The prosecution of this application has been transferred to Examiner Gary C. Vieaux from the docket of Examiner Jeremy R. Elder. Any inquiry concerning this or earlier communications should be directed to the current Examiner of record. Current contact information is provided in the last section of this communication.

Amendment

10 The Amendment filed November 23, 2004 has been received and made of record. In response to the first Office Action, the Drawings, the Specification, and claims 1 have been amended. Claims 2 and 15-17 have been cancelled.

 In response to Applicant's amended Specification, the Examiner finds the
15 amendment directly addresses the previous inconsistencies between the Drawings and the Specification in regards to indicator 41, and therefore, this objection to the Drawings is hereby withdrawn.

 In response to Applicant's amended Drawings, the Examiner finds the amended
figure 1 to address the previous inconsistencies between the Drawings and the
20 Specification in regards to indicator 32c, and therefore, this objection to the Drawings is hereby withdrawn.

Response to Arguments

Applicant's arguments with respect to claims 1, 3-14 have been considered but are moot in view of the new ground(s) of rejection.

5

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

10

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15

Claims 1, 3-4, 6-7, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Whiting et al. (US 6,034,716) in view of Houston (US 6,477,312.)

20

Regarding claim 1, Whiting discloses a panoramic digital camera system (fig. 1) that employs an image pickup device in concert with a rotating mirror (fig. 2), and then composes the captured images into a panoramic view (fig. 5) for access by multiple users; with operation of the camera independent from individual views received (col. 4 lines 10-17.)

25

Applicant submits on p. 11-12 of the Remarks, that Whiting is not capable of live broadcast, as "All images captured by camera 10 are recorded (in digital form) via a recording element of camera 10 and then transmitted to processor 12 through a cable 40." The Examiner respectfully disagrees. Whiting not only teaches the capability of live broadcast (col. 3 lines 28-41), but also provides for the elimination of the step of

entering data into memory in favor of transmitting the data for immediate reproduction
(col. 8 lines 10-14.)

However, Whiting does not explicitly disclose the overwriting of memory within its operation. Nevertheless, use of a data buffer, ring buffer or FIFO memory for use in a
5 short term overwriting memory system is well known in the art, as illustrated by Houson ('312 – col. 3 lines 34-53.) It would have been obvious to one of ordinary skill in the art at the time of the invention to employ a ring buffer as taught by Laws within the processor of the system as taught by Whiting, allowing for an image to be held temporarily, prior to its replacement by an updated image, for the purposes of
10 provisionally maintaining an image prior to being refreshed with a more recent version in the immediate reproduction and transmission of a broadcast signal.

Regarding claim 3, Whiting and Houston disclose all of the limitations of claim 3 (see the 103(a) rejection to claim 1 supra), including teaching repeated capture and composing of the images ('716 – col. 6 lines 10-14.)

15 Regarding claim 4, Whiting and Houston disclose all of the limitations of claim 4 (see the 103(a) rejection to claim 3 supra), including teaching wherein the composite image is formed by images picked up at different timing ('716 – col. 6 lines 10-14, lines 25-34.)

Regarding claims 6 and 7, Whiting and Houston disclose all of the limitations of
20 claim 4 (see the 103(a) rejection to claim 1 supra), including teaching wherein a user may zoom ('716 – Abstract) and includes the ability to control the image viewed via selection of a viewing window ('716 – col. 3 lines 40-47, col. 6 lines 60-65.)

Regarding claim 12, Whiting and Houston disclose all of the limitations of claim 8 (see the 103(a) rejection to claim 1 supra), including where image information is extracted in response to a request (col. 6 lines 54-65.)

5 **Claims 8, 10 and 11** are rejected under 35 U.S.C. 103(a) as being unpatentable over Whiting et al. (US 6,034,716) and Houston (US 6,477,312), in further view of Nakao et al. (US 6,587,597.)

Regarding claim 8, 10 and 11, Whiting and Houston disclose all of the limitations of claim 8 (see the 103(a) rejection to claim 1 supra), except for teaching wherein said
10 image pickup device comprises a plurality of cameras for live output the image information. Nevertheless, Nakao discloses the use of multiple cameras in a composite image system (fig. 45, col. 63 lines 35-40.) It would have been obvious to one of
ordinary skill in the art at the time of the invention to employ multiple cameras as taught by Nakao within the system as taught by Whiting and Houston, in order to expand the
15 area of camera coverage available for live viewing through combination of multiple images from cameras capturing multiple viewing regions.

Claims 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Whiting et al. (US 6,034,716) and Houston (US 6,477,312), in further view of Okino et
20 al. (US 5,920,349.)

Regarding claim 13, neither Whiting nor Houston goes into detail regarding operation of the zoom. Nevertheless, Okino et al. discloses an image pickup device

that uses a piezoelectric element 5 (conversion element) that compares voltages to determine the movement of a focus driver 2 (driving member), which in turn moves the focus lens 1. It would have been obvious to one of ordinary skill in the art at the time of invention to use a focus lens in the invention of Okino with the system as taught by

5 Whiting and Houston, in order to create a focusing system driven by piezoelectric elements for the benefit of omitting motors to make the invention lighter and more energy efficient.

Claims 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over
10 Whiting et al. (US 6,034,716), Houston (US 6,477,312) and Okino et al. (US 5,920,349), in further view of Parulski et al. (US 5,563,658.)

Regarding claim 14, neither Whiting, Houston, nor Okino disclose the zoom lens being driven by piezoelectric elements. Nevertheless, Parulski et al. discloses a zoom lens can be driven by a piezoelectric element (col. 7 lines 2-5.) It would have been
15 obvious to one of ordinary skill in the art at the time of invention to use a zoom lens as taught by Parulski, in combination with a focus lens in the system as taught by Whiting, Houston and Okino, in order to create a zoom and focus combination system driven by piezoelectric elements for the benefit of omitting motors to make the invention lighter and more energy efficient.

Allowable Subject Matter

Claims 5 and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5 Regarding claim 5, the prior art is not found to teach or at least fairly suggest, in combination with the claims from which dependence is derived, a system in which, in the case when there is not any request from outside for a predetermined period of time, the image pickup device is directed in the direction in which an extracted image lastly output was picked up.

10 Regarding claim 9, the prior art is not found to teach or at least fairly suggest, in combination with the claims from which dependence is derived, a system in which, in the case when there is not any request from outside for a predetermined period of time, the at least one camera is directed in the direction in which an extracted image lastly output was picked up.

15

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

20 Jackson et al (US 6,795,113) discloses a system for allowing multiple users access to combined images.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

5 A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any
10 extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact

15 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gary C. Vieaux whose telephone number is 571-272-7318. The examiner can normally be reached on Monday - Friday, 8:00am - 4:00pm.

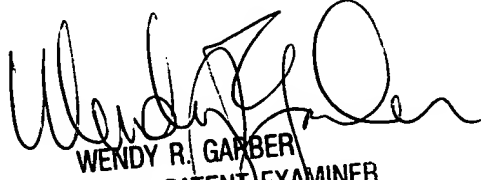
 If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached on 571-272-7308. The fax phone number
20 for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

- 5 For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Gary C. Vieaux
Examiner
Art Unit 2612

10 Gcv2


WENDY R. GARBER
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